SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
  - Trade name: Potassium hexacyanocobaltate (III), 98%
  - Item number: 93-1924
  - CAS Number: 13963-58-1
  - EC number: 237-742-1
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
  No further relevant information available.
- 1.3 Details of the supplier of the safety data sheet
  - Manufacturer/Supplier: Strem Chemicals, Inc.
  - 7 Mulliken Way
  - NEWBURYPORT, MA 01950
  - USA
  - info@strem.com
  - Further information obtainable from: Technical Department
- 1.4 Emergency telephone number:
  - EMERGENCY: CHEMTREC: +1 (800) 424-9300
  - During normal opening times: +1 (978) 499-1600

SECTION 2: Hazards identification

- 2.1 Classification of the substance or mixture
  - Classification according to Regulation (EC) No 1272/2008
    The substance is not classified according to the CLP regulation.
- 2.2 Label elements
  - Labelling according to Regulation (EC) No 1272/2008 Void
  - Hazard pictograms Void
  - Signal word Void
  - Hazard statements Void
  - Precautionary statements
    P262 Do not get in eyes, on skin, or on clothing.
    P280 Wear protective gloves/protective clothing/eye protection/face protection.
    P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
    P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
    P403+P233 Store in a well-ventilated place. Keep container tightly closed.
    P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- Additional information:
  EUH032 Contact with acids liberates very toxic gas.
- 2.3 Other hazards
- Results of PBT and vPvB assessment
  - PBT: Not applicable.
  - vPvB: Not applicable.
SECTION 3: Composition/information on ingredients

- 3.1 Chemical characterisation: Substances
- CAS No. Description
  13963-58-1 Potassium hexacyanocobaltate(III)
- Identification number(s)
- EC number: 237-742-1

SECTION 4: First aid measures

- 4.1 Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Immediately rinse with water.
- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: If symptoms persist consult doctor.
- 4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- 5.2 Special hazards arising from the substance or mixture: No further relevant information available.
- 5.3 Advice for firefighters
- Protective equipment: Mouth respiratory protective device.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures
- Mount respiratory protective device.
- 6.2 Environmental precautions: No special measures required.
- 6.3 Methods and material for containment and cleaning up:
- Dispose contaminated material as waste according to item 13.
- 6.4 Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling: No special measures required.
- Information about fire - and explosion protection: No special measures required.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage:
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Information about storage in one common storage facility: Do not store together with acids.
  - Further information about storage conditions: None.
\section*{SECTION 8: Exposure controls/personal protection}

\textbullet{} Additional information about design of technical facilities: No further data; see item 7.

\textbullet{} 8.1 Control parameters

\textbullet{} Ingredients with limit values that require monitoring at the workplace: Not required.

\textbullet{} Additional information: The lists valid during the making were used as basis.

\textbullet{} 8.2 Exposure controls

\textbullet{} Personal protective equipment:

\textbullet{} General protective and hygienic measures:
The usual precautionary measures are to be adhered to when handling chemicals.

\textbullet{} Respiratory protection: Not required.

\textbullet{} Protection of hands:

\begin{center}
Protective gloves
\end{center}

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

\textbullet{} Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

\textbullet{} Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

\textbullet{} Eye protection: Safety glasses

\textbullet{} 9.1 Information on basic physical and chemical properties

\textbullet{} General Information

\begin{table}
\begin{tabular} { | l | l |}
\hline
Appearance: & Crystalline \\
Form: & Crystalline \\
Colour: & Yellow \\
Odour: & Odourless \\
Odour threshold: & Not determined. \\
\hline
\end{tabular}
\end{table}

\textbullet{} pH-value: Not applicable.

\textbullet{} Change in condition

\begin{table}
\begin{tabular} { | l | l |}
\hline
Melting point/freezing point: & Undetermined. \\
Initial boiling point and boiling range: & Undetermined. \\
\hline
\end{tabular}
\end{table}

\textbullet{} Flash point: Not applicable.

\textbullet{} Flammability (solid, gas): Product is not flammable.

\textbullet{} Ignition temperature:

\begin{table}
\begin{tabular} { | l | l |}
\hline
Decomposition temperature: & Not determined. \\
Auto-ignition temperature: & Not determined. \\
\hline
\end{tabular}
\end{table}

\textbullet{} Explosive properties: Product does not present an explosion hazard.
### SECTION 10: Stability and reactivity

10.1 Reactivity
No further relevant information available.

10.2 Chemical stability

10.3 Thermal decomposition / conditions to be avoided:
No decomposition if used according to specifications.

10.4 Conditions to avoid
No dangerous reactions known.

10.5 Incompatible materials:
No further relevant information available.

10.6 Hazardous decomposition products:
No dangerous decomposition products known.

### SECTION 11: Toxicological information

11.1 Information on toxicological effects

11.2 Acute toxicity
Based on available data, the classification criteria are not met.

11.3 Primary irritant effect:

11.4 Skin corrosion/irritation
Based on available data, the classification criteria are not met.

11.5 Serious eye damage/irritation
Based on available data, the classification criteria are not met.

11.6 Respiratory or skin sensitisation
Based on available data, the classification criteria are not met.

11.7 CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

11.8 Germ cell mutagenicity
Based on available data, the classification criteria are not met.

11.9 Carcinogenicity
Based on available data, the classification criteria are not met.

11.10 Reproductive toxicity
Based on available data, the classification criteria are not met.

11.11 STOT-single exposure
Based on available data, the classification criteria are not met.

11.12 STOT-repeated exposure
Based on available data, the classification criteria are not met.

11.13 Aspiration hazard
Based on available data, the classification criteria are not met.
SECTION 12: Ecological information

- 12.1 Toxicity
- Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability: No further relevant information available.
- 12.3 Bioaccumulative potential: No further relevant information available.
- 12.4 Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes: Not known to be hazardous to water.
  - 12.5 Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - 12.6 Other adverse effects: No further relevant information available.

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods
  - Recommendation: Disposal must be made according to official regulations.
- Uncleaned packaging:
  - Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

- 14.1 UN-Number
  - ADR, ADN, IMDG, IATA: not regulated
- 14.2 UN proper shipping name
  - ADR, ADN, IMDG, IATA: not regulated
- 14.3 Transport hazard class(es)
  - ADR, ADN, IMDG, IATA: not regulated
  - Class: not regulated
- 14.4 Packing group
  - ADR, IMDG, IATA: not regulated
- 14.5 Environmental hazards:
  - Marine pollutant: No
- 14.6 Special precautions for user: Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
  - Not applicable.
- UN "Model Regulation": not regulated

SECTION 15: Regulatory information

- 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
  - Directive 2012/18/EU
  - Named dangerous substances - ANNEX I: Substance is not listed.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Technical Department.
- **Contact:** Technical Director
- **Abbreviations and acronyms:**
  - ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  - IMDG: International Maritime Code for Dangerous Goods
  - IATA: International Air Transport Association
  - GHS: Globally Harmonised System of Classification and Labelling of Chemicals
  - EINECS: European Inventory of Existing Commercial Chemical Substances
  - CAS: Chemical Abstracts Service (division of the American Chemical Society)
  - VOC: Volatile Organic Compounds (USA, EU)
  - PBT: Persistent, Bioaccumulative and Toxic
  - vPvB: very Persistent and very Bioaccumulative